

wherein the crystallising mixture is stirred during crystallisation;  
wherein the crystallising mixture is transported continuously through the zone of ultrasonic vibration.

10. Process according to claim 9, wherein the temperature during recrystallization is between 15 and 75°C.

11. Process according to claim 1, wherein the temperature during recrystallization is between 15 and 75°C.

12. Process according to claim 2, wherein the temperature during recrystallization is between 15 and 75°C.

13. Process according to claim 10, wherein the ultrasonic vibration is generated using an ultrasonic probe, the amplitude thereof being between 0.4 and 10  $\mu\text{m}$ .

14. Process for the production of crystalline energetic materials having improved stability and/or decreased sensitivity by crystallisation of the energetic materials with ultrasonic vibration having a frequency of between 10 and 100 kHz;

wherein the crystallising mixture is stirred during crystallisation;

wherein the crystallising mixture is transported continuously through the zone of ultrasonic vibration;

wherein the temperature during recrystallisation is between 15 and 75°C;

wherein the ultrasonic vibration is generated using an ultrasonic probe, the amplitude thereof being between 0.4 and 10  $\mu\text{m}$ .

15. Process according to claim 1, wherein the ultrasonic vibration is generated using an ultrasonic probe, the amplitude thereof being between 0.4 and 10  $\mu\text{m}$ .

16. Process according to claim 2, wherein the ultrasonic vibration is generated using an ultrasonic probe, the amplitude thereof being between 0.4 and 10  $\mu\text{m}$ .

17. Process according to claim 8, wherein the ultrasonic vibration is generated using an ultrasonic probe, the amplitude thereof being between 0.4 and 10  $\mu\text{m}$ .

18. Process for the production of crystalline energetic materials having improved stability and/or decreased sensitivity by crystallisation of the energetic materials with ultrasonic vibration having a frequency of between 10 and 100 kHz;

wherein the crystallising mixture is stirred during crystallisation;

wherein the crystallising mixture is transported continuously through the zone of ultrasonic vibration;

wherein the temperature during recrystallisation is between 15 and 75°C;

wherein the ultrasonic vibration is generated using an ultrasonic probe, the amplitude thereof being between 0.4 and 10  $\mu\text{m}$ .

wherein the energetic materials are selected from the group of explosives and high energy oxidisers

19. Process according to claim 18, wherein the energetic materials are selected from the group of explosives and high energy oxidisers.

20. Process according to claim 1, wherein the energetic materials are selected from the group of explosives and high energy oxidisers.

21. Process according to claim 2, wherein the energetic materials are selected from the group of explosives and high energy oxidisers.

22. Process according to claim 8, wherein the energetic materials are selected from the group of

*B*  
explosives and high energy oxidisers.

*Sub Bb*

23. Process according to claim 18, wherein the said energetic materials are selected from the group consisting of hydrazinium nitroformate, C120, ADN, AP, RDX, HMX and PETN.

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24. Process according to claim 19, wherein the said energetic materials are selected from the group consisting of hydrazinium nitroformate, C120, ADN, AP, RDX, HMX and PETN.

*Sub Bb*

25. Process according to claim 1, wherein the said energetic materials are selected from the group consisting of hydrazinium nitroformate, C120, ADN, AP, RDX, HMX and PETN.

26. Process according to claim 2, wherein the said energetic materials are selected from the group consisting of hydrazinium nitroformate, C120, ADN, AP, RDX, HMX and PETN.

27. Process according to claim 8, wherein the said energetic materials are selected from the group consisting of hydrazinium nitroformate, C120, ADN, AP, RDX, HMX and PETN.

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